ER Site No. 8: Open Dump (Coyote Canyon Blast Area)

ADS: 1332
Operable Unit: Foothills Test Area

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Site History

Site 8 is the surface dump associated with the Site 58 test area. Site 8 contained mainly general refuse and demolition debris. There is evidence of open burning in the southeast corner of the site. The site is not currently being used as an active dump.

Sites 8 and 58 are interrelated in both the activities conducted at the sites and geographically. Site 8 is fully contained within the 4,000-foot diameter circle defining the fragment boundary surrounding the Site 58 test area. A north-south oriented road dissects Site 58 and provides site access from the north and south. Site 8 is bounded by this road to the east, the end of debris to the north (approximately 3,200 feet from Coyote Springs Road), the base of the steep ridge to the west, and the end of test debris to the south.

Site 8 is generally flat and gently sloping to the south southwest. It is bordered on the NW by a ridge. A medium-sized arroyo runs from the east to the west about 600 feet south of the site. A smaller arroyo runs from the north to the south through the west side of Site 8. Both arroyos are dry, except during and immediately after heavy storms.

Site 8 is approximately 31 acres based on the debris areas as determined by historical accounts, aerial photographs and site surveys. Not all the area within the site boundary contained debris.

The vegetation consists mostly of sparse grasses and cacti. Small juniper trees are found in small numbers. Two Wright's Pincushion cacti, an endangered species, have been found on Site 8.

Constituents of Concern

The site appears to have contained mainly refuse and demolition debris deposited on the surface. Interviews indicate that some open burning was conducted at Site 8. Surface inspection and historical photographs reveal that the dump contained: 12-15 blown-apart glove boxes that contained no hazardous materials, forms, cradles, unexploded ordnance, scrap metal, plastics, wires, pieces of concrete, miscellaneous cans and bottles, high temperature ceramic firing bricks, rocket motors and high explosives [which were removed by Kirtland Air Force Base(KAFB)], ceramic and silica insulators, scrap and wood from explosive packing crates.

The Constituents of Concern (COCs) in the area are beryllium, asbestos, lead, depleted uranium and high explosives according to draft field notes from Comprehensive Environmental Assessment and Response Program (CEARP). Soil and debris containing CS-137, thorium, tritium, and depleted uranium (DU) were found and removed during recent Voluntary Corrective Measure (VCM) activities. Soil sampling data has identified some elevated metals levels, total petroleum hydrocarbons, and low levels of high explosives in isolated soil samples.

Current Hazards

At the former location of the surface dump (the middle of SWMU 8) there are minor levels of explosives and slightly elevated metals levels remaining in the soil after the voluntary corrective measure/voluntary corrective action activities. These levels will pass risk assessment and no further work is planned in this area. In the southeast corner of the site (Area of Open Burning) there are soils potentially contaminated with heavy metals (primarily lead) and radionuclides. There may be structures or stored materials that remain at the site that are a potential hazard.

Current Status of Work

During the PSI, it was noted that pieces of high explosives (HE) and old rocket motors (with some explosive remaining) were scattered around the dump and down the arroyo. There were chunks of HE (1-4" diameter) scattered over the hillside to the west of Site 8.

During the time of the PSI, KAFB Explosive Ordnance Disposal (EOD) group surveyed the area and collected surficial items containing potential unexploded ordinance/high explosives (UXO/HE). EOD collected two dump truck loads of explosive material for disposal.

Another UXO survey was conducted in 1993. Live ordnance and ordnance debris were found including: ordnance shipping containers, bomb fuses, trip flares, cartridges with primer, 5-lbs of partially burned HE, rocket motors, and smoke grenades. These materials were subsequently removed and destroyed.

In October and November 1993, RUST Geotech Inc. conducted a surface gamma radiation survey at ER Site 8. One point-source anomaly was detected at 994 µR/hr. Background activities were measured at approximately 10-13 µR/hr. The radioactive material appeared to be a gray plastic with white veins of material in it. Sandia Radiation Protection Operations removed the fragment, conducted an analysis, and found the radioactive material was cesium (CS-137). Based

on this result it is believed that this fragment came from a weapons test that had CS-137 as a component of the fire set in the weapon.

Radioactive fragments, point-sources, and UXO were removed in 1995 as a VCM. A VCM was conducted in 1996 to remove surface debris from the site prior to the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI). Another VCM was conducted to remove radioactive material from the Site 8 Area of Open Burning in 1997. A Voluntary Corrective Action (VCA) was conducted in 1998 to remove soils containing elevated levels of metals, explosives, asbestos, and radioactive materials. RFI sampling is complete and sampling data is under evaluation. The debris on the site has been completely removed from the surface dump area. The site has been regraded and revegetated.

Future Work Planned

The data from the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI)is being evaluated. The work plan for this investigation has been conditionally approved. A VCM is planned for the southeast corner of the site (Area of Open Burning)to remove soils contaminated with heavy metals and possibly radioactive waste. An NFA will be submitted to NMED following the VCM.

Waste Volume Estimated/Generated

Sixty-nine drums of radioactive waste, 3 drums of mixed waste, 10 gallons of hazardous waste, 3 drums of asbestos waste, and 423 cubic yards of nonhazardous wastes have been generated at this site.

Information for ER Site 8 was last updated Jan 29, 2003.